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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,957	01/25/2002	Theodore W. Houston	TI-25900.1	9230
23494	7590	02/10/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			THOMAS, TONIAE M	
P O BOX 655474, M/S 3999			ART UNIT	
DALLAS, TX 75265			PAPER NUMBER	
			2822	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/054,957

Applicant(s)

HOUSTON ET AL.

Examiner

Toniae M. Thomas

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-11 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) 9,11,24 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. In view of the appeal brief filed on 12 December 2003, PROSECUTION IS HEREBY REOPENED, and the amendment filed on 09 October 2003 under 37 CFR 1.116 has been entered. A new ground of rejection is set forth below.
2. To avoid abandonment of the application, appellant must exercise one of the following two options: (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or, (2) request reinstatement of the appeal.
3. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).
4. Currently, claims 9-11 and 24-26 are pending. Of these, claims 9, 11, 23, and 26 have been withdrawn from further consideration. Since a divisional has been filed for claims 9, 11, 23, and 26, these claims should be canceled in the current application.
5. In the final Office action mailed on 09 September 2003, claims 10 and 25 as presented in the amendment filed on 30 June 2003 were rejected under 35 USC §112, first paragraph for containing subject matter not supported by the originally filed specification; and under 35 USC §112, second paragraph for being indefinite. Also in that action, claims 10 and 25 were rejected under 35 USC §102(b). Applicant's arguments with respect to the rejection of claims 10

and 25 under 35 USC §112, first paragraph have been fully considered and are persuasive (see page 4, line 22 through page 5, line 7 of the appeal brief filed on 12 December 2003 ). Similarly, the amendment filed on 09 October 2003 has overcome the rejection of claims 10 and 25 under 35 USC §112, second paragraph and under 35 USC §102(b). Therefore, the rejections under 35 USC §112, first and second paragraphs, and 35 USC §102(b) set forth in the final action mailed on 09 September 2003 have been withdrawn.

6. However, upon further consideration, a new ground of rejection is made in view of newly found prior art reference Jones et al. (US 4,212,683). A rejection of claims based on the new reference follows.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones et al. (US 4,212,683).

The Jones et al. patent (Jones) discloses a transistor (see figs. 1-6 and accompanying text). The transistor comprises: a semiconductor substrate 11 having first and second spaced apart source/drain regions 12 and 13 therein


(fig. 2 and ); and a channel region between the source/drain regions in the substrate having a relatively low  $V_T$  central region 27 between the source/drain regions and relatively high  $V_T$  regions 28 and 29 adjacent to the source/drain regions (fig. 6; col. 4, lines 62-64; col. 5, lines 28-37; and col. 6, lines 3-11), the channel region having an implanted negative  $V_T$  dopant intermediate the source/drain regions (fig. 6 and col. 4, lines 62-68) and having an implanted positive  $V_T$  dopant adjacent the source/drain regions that is opposite the dopant in the central or intermediate region 27 (fig. 6 and col. 5, lines 28-37).<sup>1</sup>

The first source/drain region 12 is a source region and the second source/drain region 13 is a drain region (col. 4, lines 34-37).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toniae M. Thomas whose telephone number is (571) 272-1846. The examiner can normally be reached on Monday-Thursday from 8:30 a.m. to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mary Wilczewski  
Primary Examiner

TMT  
02 February 2005

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<sup>1</sup> The term "opposite" as it is used in the claim is interpreted to mean "opposite conductivity type."